

CLAIMS

I claim:

1. A medical tubing pump comprising a pump wheel (6) having a circumference and a front side perpendicular to the wheel axis, two tubing insertion locations (20, 22) for insertion of a pump tubing such that the tubing wraps around the pump wheel (6), and a stationary protective ring (12) surrounding the entire circumference of the pump wheel (6) at the front side of the wheel for covering the inserted pump tubing.
2. The medical tubing pump according to claim 1, wherein the protective ring (12) directly borders the pump wheel (6) without contact over the entire circumference of the pump wheel (6).
3. The medical tubing pump according to claim 1, wherein the protective ring (12) extends essentially flush to the front side of the pump wheel (6).
4. The medical tubing pump according to claim 1, wherein the protective ring comprises a front plate which covers the front side of the pump wheel (6) and extends radially outwardly beyond the circumference of the pump wheel (6).
5. The medical tubing pump according to claim 1, wherein the protective ring (12) forms a sub-assembly with the tube insertion locations (20, 22).
6. The medical tubing pump according to claim 5, wherein the protective ring (12) is formed as one piece with the tubing insertion locations (20, 22).
7. The medical tubing pump according to claim 6, wherein the one piece is made of plastic.
8. The medical tubing pump according to claim 1, wherein the protective ring (12) is part of a cage (10) surrounding the pump wheel.
9. The medical tubing pump according to claim 8, wherein the cage (10) comprises a rear ring (16) which circumferentially surrounds the pump wheel (6) and bears on a front plate (2) of a pump housing, and wherein the rear ring (16) is spaced from the protective ring (12) by an amount at least equal to a diameter of the pump tubing to be inserted.
10. The medical tubing pump according to claim 9, wherein the spacing between the protective ring (12) and the rear ring (16) forms a gap (18) for accommodating the pump tubing, wherein the gap (18) extends along a section of the wheel circumference and the gap is continuous in a radial direction of the rings from the wheel circumference to outside the cage.

11. The medical tubing pump according to claim 9, wherein the protective ring (12) and the rear ring (16) of the cage (10) are connected to one another in a region of the tubing insertion locations (20, 22).

5 12. The medical tubing pump according to claim 1, wherein at least one tubing insertion location (20) comprises a receptacle for a sensor system.

13. The medical tubing pump according to claim 1, wherein the protective ring (12) has a radial extension which is at least equal to a diameter of the pump tubing.